

OPINION 2229 (Case 3405)***Trigonostomum* Schmidt, 1852 (Platyhelminthes, TRIGONOSTOMIDAE) and *Trigonostomus* Brenske, 1893 (Coleoptera, SCARABAEIDAE): generic names conserved**

Abstract. The Commission has ruled that the generic name *Trigonostomum* Burmeister, 1844 for a scarabeid beetle be suppressed, and the incorrect subsequent spelling *Trigonostomus* Brenske, 1893 is deemed available. The Commission has also ruled the entire generic name *Trigonostomus* Brenske, 1893 should be adopted as the stem, so that the correct spelling of the chafer subtribe name will become TRIGONOSTOMUSINA Ohaus, 1912 to remove homonymy with the flatworm family-group name TRIGONOSTOMIDAE Graff, 1905. This conserves the widespread usage of the generic name *Trigonostomum* Schmidt, 1852 for a group of marine flatworms.

Keywords. Nomenclature; taxonomy; Platyhelminthes; Coleoptera; Rhabdozoa; TRIGONOSTOMIDAE; HYPORHYNCHINAE; SCARABAEIDAE; TRIGONOSTOMUSINA; *Trigonostomum*; *Trigonostomus*; *Trigonostomum setigerum*; *Trigonostomus mucoreus*; marine free-living flatworms; scarab beetles.

Ruling

- (1) Under the plenary power it is hereby ruled that:
 - (a) the generic name *Trigonostomum* Burmeister, 1844 and all uses of the name are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;
 - (b) the generic name *Trigonostomus* is deemed available from Brenske, 1893 and is not invalid by reason of being an incorrect subsequent spelling of *Trigonostomum* Burmeister, 1844;
 - (c) *Trigonostomum mucoreum* Burmeister, 1844 is designated as the type species of *Trigonostomus* Brenske, 1893;
 - (d) the stem of the generic name *Trigonostomus* Brenske, 1893, as deemed available in (1b) above, is TRIGONOSTOMUS-.
- (2) The following names are placed on the Official List of Generic Names in Zoology:
 - (a) *Trigonostomum* Schmidt, 1852 (gender: neuter), type species by monotypy *Trigonostomum setigerum* Schmidt, 1852;
 - (b) *Trigonostomus* Brenske, 1893 (gender: masculine), type species *Trigonostomum mucoreum* Burmeister, 1844, as designated in (1c) above.
- (3) The following names are placed on the Official List of Specific Names in Zoology:
 - (a) *setigerum* Schmidt, 1852, as published in the binomen *Trigonostomum setigerum* (specific name of the type species of *Trigonostomum* Schmidt, 1852 and of *Hyporhynchus* Graff, 1882);
 - (b) *mucoreum* Burmeister, 1844, as published in the binomen *Trigonostomum mucoreum* (specific name of the type species of *Trigonostomus* Brenske, 1893).

- (4) The following names are placed on the Official List of Family-Group Names in Zoology:
- (a) TRIGONOSTOMIDAE Graff, 1905, type genus *Trigonostomum* Schmidt, 1852 (Platyhelminthes);
 - (b) TRIGONOSTOMUSINA Ohaus, 1912, type genus *Trigonostomus* Brenske, 1893 (spelling emended by ruling in (1d) above) (Coleoptera).
- (5) The name *Trigonostomum* Burmeister, 1844, as suppressed in (1a) above is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- (6) The name TRIGONOSTOMINA Ohaus, 1912 (an incorrect original spelling of TRIGONOSTOMUSINA, as ruled in (1d) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Case 3405

An application to conserve the widespread usage of the generic name *Trigonostomum* Schmidt, 1852 for a group of marine flatworms (family TRIGONOSTOMIDAE) and to remove the homonymy between the chafer subtribe name TRIGONOSTOMINA Ohaus, 1912 (type genus *Trigonostomum* Burmeister, 1844; family SCARABAEIDAE) and the flatworm family name TRIGONOSTOMIDAE Graff, 1905 (type genus *Trigonostomum* Schmidt, 1852) was received from Wim R. Willems (*Swedish Museum of Natural History, Stockholm, Sweden & Centre for Environmental Sciences, Hasselt University, Diepenbeek, Belgium*) and Frank-Thorsten Krell (*Denver Museum of Nature & Science, Denver, CO, U.S.A*) on 17 November 2006. After correspondence the case was published in BZN 64: 218–223. The title, abstract and keywords of the case were published on the Commission's website. One supportive comment on this case was published in BZN 65: 216.

Decision of the Commission

On 1 December 2008 the members of the Commission were invited to vote on the proposals published in BZN 64: 220–221. At the close of the voting period on 1 March 2009 the votes were as follows:

Affirmative votes – 17: Bogutskaya, Bouchet, Brothers, Fautin, Grygier, Halliday, Krell, Kullander, Lamas, Lim, Minelli, Ng, Pape, Papp, Rosenberg, van Tol and Zhang.

Negative votes – 2: Alonso-Zarazaga and Štys.

Kottelat, Patterson and Pyle were on leave of absence.

Alonso-Zarazaga, voting AGAINST, said that, in his opinion, this application had several problems: (1) the authors did not give a list of the species originally included by name in *Hyporhynchus* Graff, 1882, so it was not possible to know if the designation of *Trigonostomum setigerum* Schmidt, 1852 as its type species is valid; (2) he could not find any advantage in changing a name that has been consistently in use in Coleoptera since 1844, because of the incorrect use of a homonym in Platyhelminthes from 1852. In this case, the incorrect use would needlessly supersede the correct one; and (3) the use of *Trigonostomum* Schmidt, 1852 is not overwhelming and *Trigonostomum* Burmeister, 1844 has been in use during the 20th century. Thus, in his opinion, the necessary change was on the side of the platyhelminth name to keep the Principle of Priority: the platyhelminth genus should become *Hyporhynchus*

Graff, 1882 and the family name (which has priority) should be HYPORHYNCHINAE Graff, 1882. Alonso-Zarazaga said that was just a matter of getting used to this, since the taxa under discussion are of limited importance. He concluded by saying that setting aside the Principle of Priority here provokes more problems than it solves. Ng said he voted FOR because it seemed the best way out of the problem without resorting to a new name or new act. He also noted that this was a ‘cross-disciplinary’ application with both helminthologists and entomologists working together. Bouchet, voting FOR, pointed out that there is a gastropod name *Trigonostoma* Blainville, 1825, which has been made the type of the family group name TRIGONOSTOMINAE Cossmann, 1899 (p. 5). The state of the art is to regard it as a synonym of the subfamily Cancellariinae of the CANCELLARIIDAE Forbes & Hanley, 1851. However, no phylogeny of the CANCELLARIIDAE has been published to date. Molecular work is in progress (Modica & Oliverio, University of Rome), and we do not yet know which names will be needed in the future to classify the genera of CANCELLARIIDAE. He hesitated, though, to add this name to the Case being discussed, because there is currently no need to make a decision on the gastropod family group name, and certainly no need to place it on an Official List with whatever spelling. Gastropod family group names based on a genus with the suffix -stoma (meaning mouth) have historically variously been formed in –STOMIDAE or –STOMATIDAE. In his nomenclator of gastropod families (Bouchet & Rocroi, 2005, *Malacologia*, 47), he and his co-author argued that mnemonics is best served by consistently deriving them in –STOMATIDAE (also in accordance with Appendix D, Table 2, of the 3rd edition of the Code) and their nomenclator entry is under TRIGONOSTOMATINAE. Bouchet said that he expects that, if and when a family-group name of cancellariids based on *Trigonostoma* Blainville, 1825, becomes necessary, TRIGONOSTOMATINAE is the spelling that malacologists should use without the need to submit the case to the Commission.

Original references

The following are the original references to the names placed on Official Lists and Indexes by the ruling given in the present Opinion:

- mucozeum*, *Trigonostomum*, Burmeister, 1844, *Handbuch der Entomologie*, vol. 4(1): 467.
setigerum, *Trigonostomum*, Schmidt, 1852, *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe*, 9: 500.
 TRIGONOSTOMIDAE Graff, 1905, *Zeitschrift für Wissenschaftliche Zoologie*, 83: 109.
 TRIGONOSTOMINA Ohaus, 1912, *Deutsche Entomologische Zeitschrift*, 1912: 151.
Trigonostomum Burmeister, 1844, *Handbuch der Entomologie*, vol. 4(1): 466.
Trigonostomum Schmidt, 1852, *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe*, 9: 500.
Trigonostomus Brenske, 1893, *Societas Entomologica*, 8: 1.